

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63989

Monday, November 22, 2010 3:23:16 PM



Page 2

Item ID:	D3183-045	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Bearing Assembly					
Start Date:	11/22/2010	Start Qty:	20.00			
Required Date:	11/30/2010	Req'd Qty:	20.00			
Reference:						
				Cust Item ID:		
				Customer:		

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Small Fab	0.00							
Small Fab	Memo	0.00							
Small Fab	Press D3183-5 Bearing into D3183-9 Cap as per Dwg D3183.								
140 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
150 	Identify as per dwg & Stock Location <u>236</u>	0.00							
Packaging	Memo	0.00							
Packaging									

Handwritten notes and signatures:

- Signature: *EB* Date: *10/12/01* Stamp: *(41x)*
- Signature: *Pro* →
- Signature: *count* Stamp: *(x40)* Stamp: *(40)*
- Signature: *10/12/10*
- Signature: *10/12/10* Stamp: *(41x)*
- Stamp: *(41)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3183-045 PAR #: _____ Fault Category: Machined Parts NCR: (Yes) No DQA: [Signature] Date: 10/12/02

Resolution: Scrap Disposition: Scrap QA: N/C Closed: [Signature] Date: 10/12/02

NCR: <u>63989</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>10/12/01</u>	<u>#140</u>	Found at step #140 that qty x1 D3183-5 cap is too narrow .229 should be .279. R.C. only part out of 41000 looks like end of bar.	<u>[Signature]</u>	-Scrap & Destroy D3183-5 cap.	<u>EP</u> <u>10/12/01</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>S</u> <u>10/12/01</u>
			<u>[Signature]</u>	Put qty x1 D3183-5 B64125	<u>EP</u> <u>10/12/01</u>			
			<u>[Signature]</u>	Back into stock	<u>[Signature]</u> <u>10/12/01</u>		<u>[Signature]</u>	<u>S</u> <u>10/12/01</u>

NOTE: Date & initial all entries

Work Order ID 63989

Monday, November 22, 2010 3:23:16 PM



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Item ID: D3183-045

Accept



Setup Start



Revision ID:

Stop



Item Name: Bearing Assembly

Start Date: 11/22/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 11/30/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

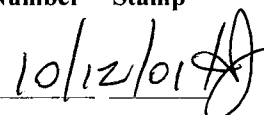
0.00

QC

Memo

0.00

Quality Control

10/12/01 
BS 10-12-1

Dart Aerospace Ltd

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NOTE: Date & initial all entries

Picklist Print

Monday, November 22, 2010 3:23:20 PM

Page 1

Work Order ID: 63989

Parent Item: D3183-045

Parent Item Name: Bearing Assembly



Start Date: 11/22/2010

Required Date: 11/30/2010

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP A 04.02.18 New issue KJ/DS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3183-5		Manufactured	No			110	Each	22.0000	1	20			
Bearing													

Location	Loc Qty	Loc Code
ST236	22	
47606	1	
52135	2	
63007	19	

MDELNR1.000		Purchased	No			130	f	8.4290	0.0333	0.701053			
Delrin Round Bar 1"													

Location	Loc Qty	Loc Code
MAT	3.139	
114733	3.139	
MAT050	5.29	
108804	5.29	

Delrin Round Bar 1 1/4
J.F.S.

114733

1.4 PL ST 10/11/24

EP 10/12/01
64125 (22)

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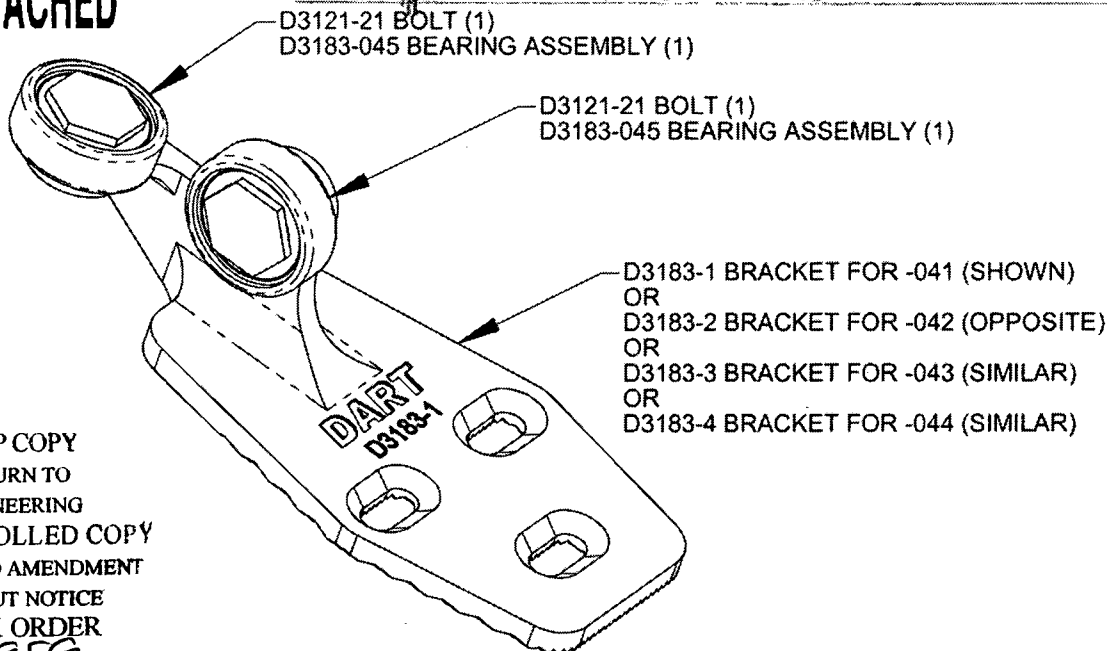


DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
CI	# 04.11.09	0.830 WAS 0.850	

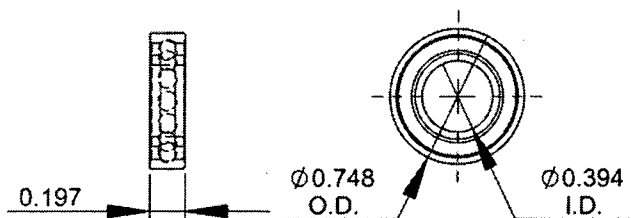
RELEASED
04.03.01
DEO ATTACHED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 63959

3/10/11/22

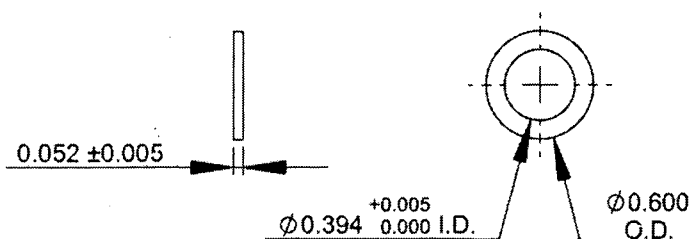


D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R)
ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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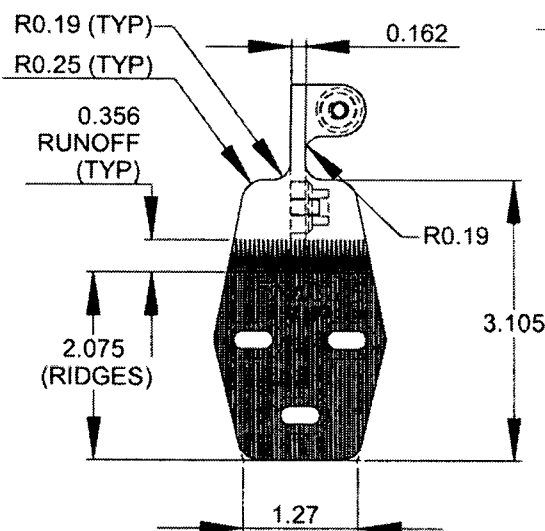
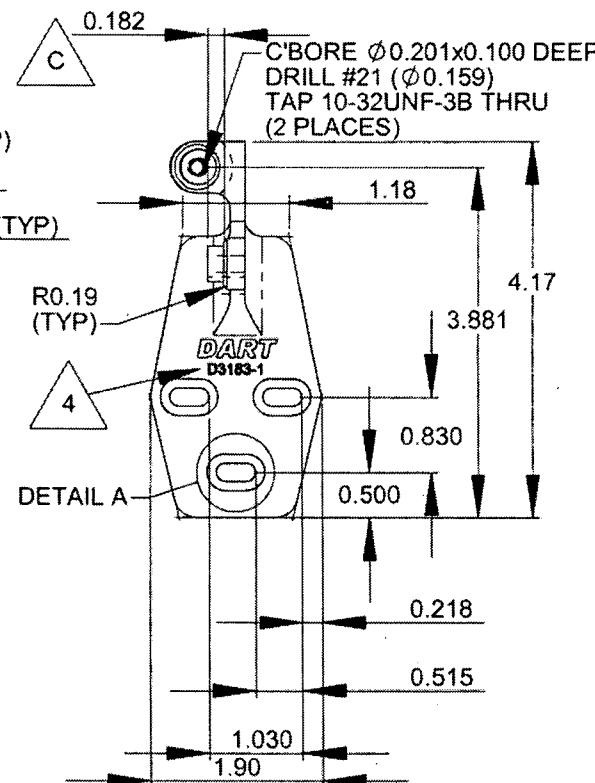
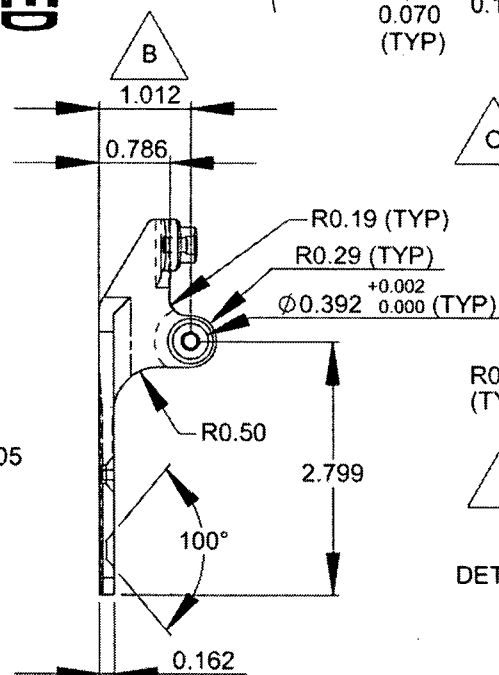
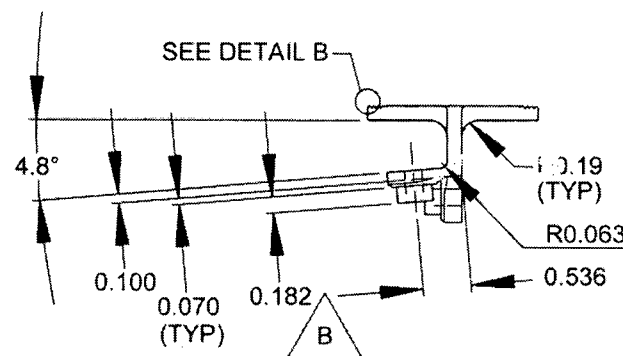
DART

QA CONTROL

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE 04.02.17	DRAWING NO. D3183	REV. C
	TITLE BRACKET ASSEMBLY	SHEET 2 OF 4
		SCALE 1:2

RELEASED
04-03-01

DEO ATTACHED



**D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

w/o 43989

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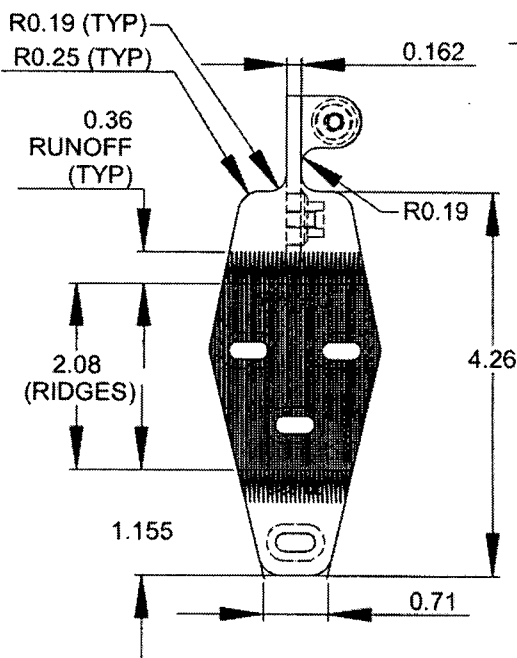
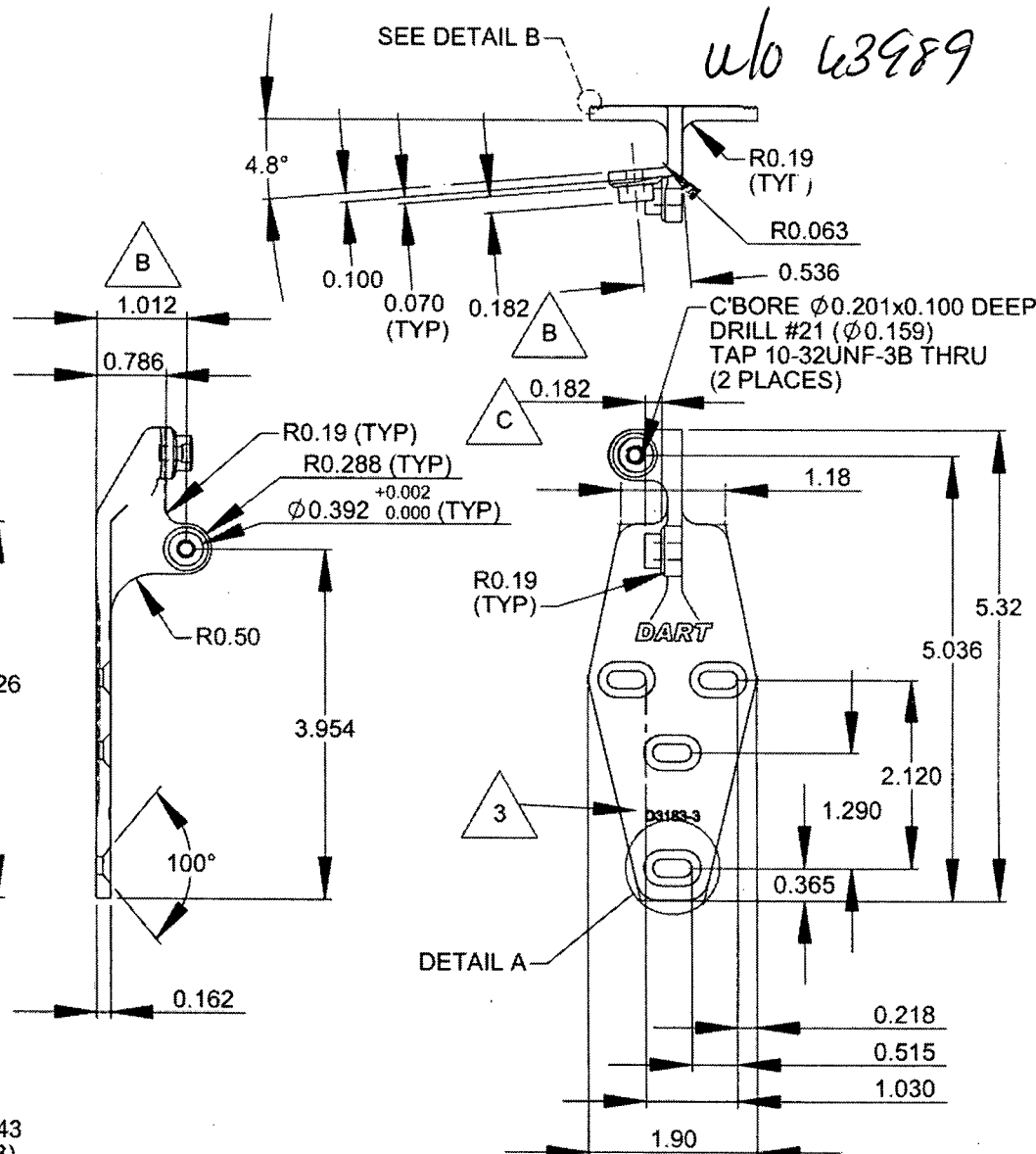
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART



DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. C
04.02.17	D3183	SHEET 3 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

DEO ATTACHED

RELEASED

24.05.01

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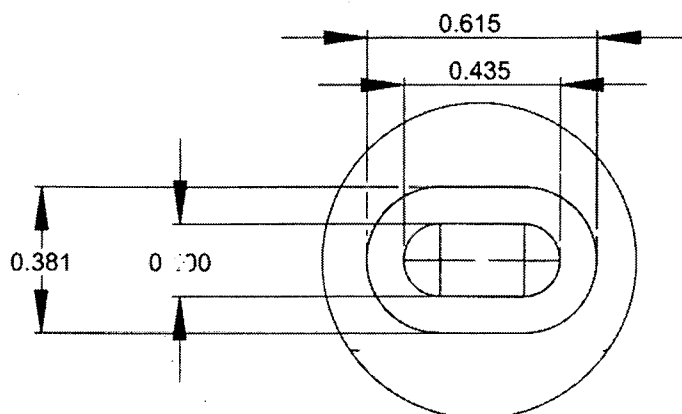
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DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17	TITLE BRACKET ASSEMBLY		SCALE 1:1



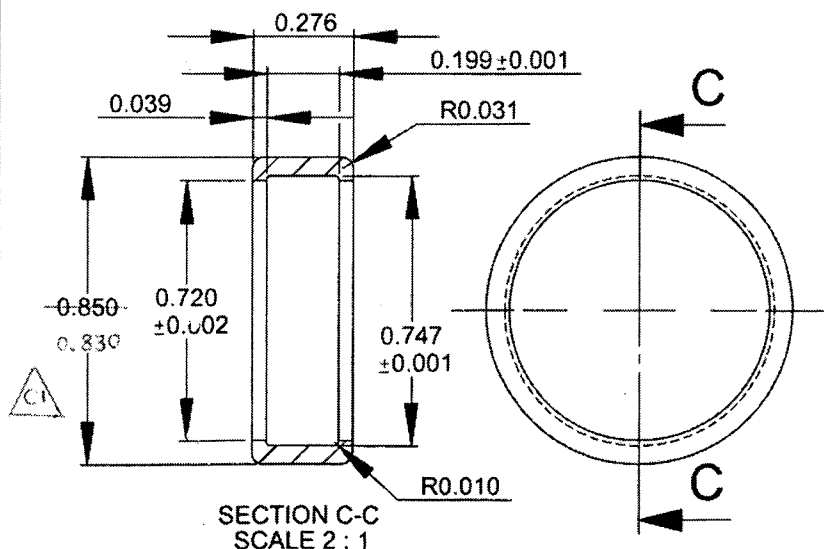
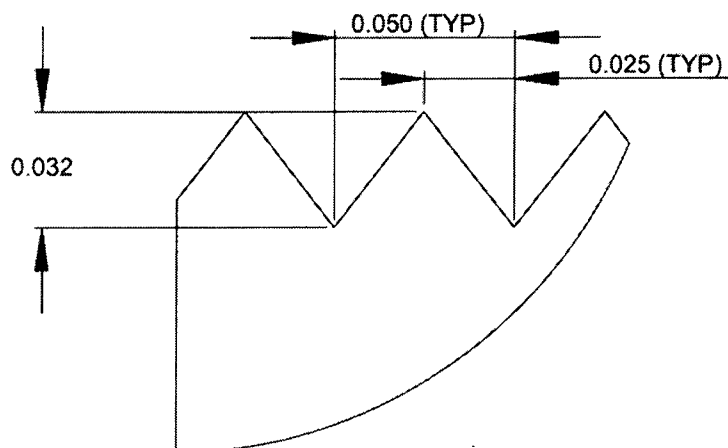
DETAIL A (2 : 1)

a/o 43989

RELEASED
04.03.01

DEO ATTACHED

DETAIL B (20 : 1)



D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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